

CLAIMS

What is claimed is:

1. A portable computer system comprising:

a processor coupled to a bus;

5 a light sensor coupled to said bus and for providing an ambient light information signal to said processor;

a lighted display device coupled to said bus and for providing a visual display;

10 a display controller coupled to said bus and for controlling said visual display;

a data storage device coupled to said bus and comprising preconfigured dynamically adjustable brightness range setting data for implementing a plurality of different ranges;

and

15 wherein said processor automatically selects a stored range of said plurality of stored ranges based on said ambient light information signal from said light sensor.

2. The portable computer system of Claim 1 further comprising an
20 adjustment display for enabling the user to adjust a brightness setting within said selected range for said display device.

3. The portable computer system of Claim 1 wherein said lighted display device is transmissive.

4. The portable computer system of Claim 1 wherein said lighted display device is emissive.

5. The portable computer system of Claim 1 wherein said lighted display device is reflective.

6. The portable computer system of Claim 1 wherein said lighted display device is transflective.

7. The portable computer system of Claim 2 wherein said adjustment display comprises a brightness bar with user adjustable slider.

8. The portable computer system of Claim 2 wherein said adjustment display comprises a plurality of selectable brightness levels.

9. The portable computer system of Claim 2 wherein the relative position of said brightness setting remains unchanged upon a change from one selected range to another selected range.

10. The portable computer system of Claim 9 wherein said display controller adjusts brightness of said display device according to said range and brightness setting.

11. The portable computer system of Claim 10 further comprising a user-configurable time period for implementing any brightness changes to said display device.

12. The portable computer system of Claim 11 wherein said time period setting is fixed.

13. A portable electronic device comprising:
5 a processor coupled to a bus;
a light sensor coupled to said bus and for providing ambient light information signal to said processor;
a lighted display device coupled to said bus and for providing a visual display;
10 a display controller and for controlling said visual display;
a data storage device coupled to said bus and comprising preconfigured dynamically adjustable brightness ranges;
and
wherein said processor selects a brightness range of said stored
15 brightness ranges based on preset range configuration data and said ambient light information signal from said light sensor.

14. The portable electronic device of Claim 13 further comprising an adjustment display for enabling the user to adjust brightness of said display
20 device within said range setting.

15. The portable electronic device of Claim 13 wherein said lighted display device is transmissive.

25 16. The portable electronic device of Claim 13 wherein said lighted display device is emissive.

17. The portable electronic device of Claim 13 wherein said lighted display device is reflective.

18. The portable electronic device of Claim 13 wherein said lighted display device is transfective.

19. The portable electronic device of Claim 14 wherein said adjustment display is a graphical user interface comprising a brightness bar and a user adjustable slider.

20. The portable electronic device of Claim 14 wherein said adjustment display is a graphical user interface comprising a plurality of user selectable brightness levels.

21. The portable electronic device of Claim 14 wherein the relative position of said brightness setting remains unchanged upon change from a first brightness range to another brightness range.

22. The portable electronic device of Claim 21 wherein said display controller implements adjustment to brightness of said display device according to said selected brightness range and brightness setting.

23. The portable electronic device of Claim 22 further comprising a user-configurable time-delay for implementing any adjustment to brightness of said display device.

24. The portable electronic device of Claim 23 wherein said time delay is fixed.

25. In a portable electronic device, a method of responding to a
5 change in ambient light conditions comprising:

a) detecting said change in ambient light conditions and generating a signal in response thereto;

b) in response to said signal, a processor of said portable electronic device selecting a brightness range from a plurality of stored
10 brightness ranges based on preconfigured range information; and

c) implementing said brightness range to alter the brightness of a display device of said portable electronic device.

26. A method as described in Claim 25 further comprising:

d) allowing a user to adjust a brightness setting within said
15 selected brightness range; and

e) altering said brightness of said display device based on said brightness setting.

27. A method as described in Claim 26 wherein said d) is
20 implemented using a graphical user interface.

28. A method as described in Claim 25 wherein c) comprises
employing a time delay between any brightness transition of said display
25 device.

29. A method as described in Claim 25 wherein a) is performed by a light sensor of said portable electronic device.

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